

Eye Movement Desensitization and Reprocessing Therapy and Related Treatments for Trauma: An Innovative, Integrative Trauma Treatment

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Eye movement desensitization and reprocessing (EMDR) therapy is a very useful and innovative evidence-based treatment for posttraumatic stress disorder (PTSD), complex trauma, dissociative disorders, and many other conditions. It has received a strong recommendation in all of the recently published treatment guidelines for PTSD, with the exception of the American Psychological Association, Guideline Development Panel for the Treatment of PTSD in Adults (2017), which gave it a conditional recommendation, largely due to the limited research reviewed. This article describes the development of EMDR therapy and its method, outlines its 8-stage protocol, provides an overview of literature on the topic and research that supports its efficacy, and describes various clinical offshoots utilizing bilateral stimulation. EMDR therapy is an integrative treatment that incorporates methods from other treatment modalities while focusing on a number of elements involved in the traumatic response—such as emotions, cognitions, and somatosensory responses. EMDR therapy directs the client to imagine elements of the trauma memory while engaging in saccadic (back and forth) eye movements (or other bilateral stimuli) to create a condition of dual-awareness that assists in the processing of the traumatic material. It follows an 8-stage protocol starting with engagement in treatment and assessment of the client and the trauma memory, to processing of the trauma with bilateral stimulation conducted in sets, to evaluation of the ratings of positive and negative cognitions and somatosensory scanning until they are reported by the client to be “cleared” (i.e., resolved, with no residual distress). EMDR therapy is now often used in integrative ways with other therapies (relational psychoanalysis, ego state therapy, somatic therapies). Several of EMDR’s better known and more frequently practiced offshoots, include brain-spotting (Grand, 2013) and life span integration (Pace, 2003) are discussed.

Clinical Impact Statement

This article will introduce psychotherapists to eye movement desensitization reprocessing (EMDR) therapy, an innovative and integrated treatment for trauma. The procedures involved in EMDR treatment are outlined. Treatment concerns for special populations, such as dissociative patients, patients with complex or attachment traumas, and traumatized children are described. The best known offshoots of EMDR, brain-spotting and life span integration, are also briefly discussed.

Keywords: eye movement desensitization reprocessing, EMDR, trauma treatment, complex trauma

Eye movement desensitization reprocessing (EMDR) therapy is a treatment modality that applies to the entire spectrum of trauma, not

only posttraumatic stress disorder (PTSD) that arises from fear-based responses associated with one-time trauma, but also other forms of posttraumatic presentations emerging from attachment trauma, complex developmental trauma, intergenerational trauma, and betrayal trauma. Securely attached clients with reasonable affect tolerance who are survivors of one-event fear-based traumas—for example, motor vehicle accidents and assaults—can become free from PTSD symptoms in very few sessions.

Editor’s Note. Jeffrey Zimmerman served as Action Editor.

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This symptom-free outcome of EMDR treatment is known as *clearing*, which means that clients can hold a traumatic event in mind while experiencing no symptoms of PTSD, including no negative cognitions (NCs), no trauma-related distressing sensations, no flashbacks, and no nightmares.

More pervasive or repetitive trauma, known as developmental trauma, relational or attachment trauma, or, more commonly, complex trauma (Courtois & Ford, 2013; e.g., years in a war zone or a horrific childhood of abuse and neglect), requires more sessions of EMDR treatment. Clinical work with these client populations will need time spent on stabilization, safety, and the establishment of trust in both the therapist and the therapy process itself. EMDR can also be used to transform what Francine Shapiro, the developer of EMDR, refers to as “small *t*” traumas involving stressors such as relationship breakups, painful work experiences, or non-life-threatening yet frightening medical experiences. EMDR can also be useful in addressing ruptures in attachment that are frequently at the heart of many personality, attachment, and secondary dissociation disorders, including experiences of inattentive or unpredictable primary caregivers, early separations, overly frequent moves, and noncatastrophic losses during early development.

When used with ego-state therapies, EMDR can be used to clear the catastrophic attachment and pervasive trauma of tertiary dissociation in which dissociative coping strategies become primary. Examples of tertiary dissociative phenomena include dissociative identity disorder (DID), previously known as multiple personality disorder, and complex traumatic stress presentations, which may manifest as personality disorders, intense PTSD, addictions, avoidance of intimacy, and the use of dissociation as a first-response coping strategy (Brown, 2015; Forgash & Copeley, 2008; Paulsen, 2009; R. Shapiro, 2016).

While EMDR therapy has now been practiced internationally and across a wide range of settings and types of trauma, it can be considered an innovative psychotherapy, perhaps the benchmark of practice innovation. This is largely due to its unique method of application and action, its relative newness as a modality, and to the fact that EMDR practitioners con-

tinue to develop new contexts in which to apply it. Because it is also rarely taught during professional training in the mental health disciplines and instead is almost always acquired via continuing professional education, it continues to be perceived by some practitioners as exotic. As this article will illustrate, EMDR is anything but exotic; although it may not resemble therapy as usually executed, its research and practice base are solid and well integrated into a wide range of psychotherapeutic paradigms (F. Shapiro, 2002), making it an excellent example of integrative psychotherapy.

A Brief History of EMDR

In 1987, Francine Shapiro (not related to the first author) was distressed about health issues and went for a walk during which she noticed her eyes moving back and forth as she focused on her upset. She noticed that afterward she felt much better emotionally. As a participant-observer and local clinical scientist she shared her observation with others, notably Joseph Wolpe, who experimented with her observation and collaborated with her in developing an initial treatment protocol. Over time, she elaborated a protocol that focused on thoughts, emotions, and body responses associated with memories of trauma while engaging in sets (i.e., multiple occasions strung together) of back-and-forth eye movements, with participants/clients following the clinician’s moving fingers held in front of their eyes. She followed up with a research study that assigned subjects to the protocol with and without the eye movements (F. Shapiro, 1989, 2001). In that initial research, eye movement desensitization (EMD)—as she initially called it—was found to significantly decrease the subjects’ distress while increasing their confidence and well-being, while also reducing posttraumatic symptoms. Further research and study eventually led to changes to the original protocol, and Shapiro changed the name to EMDR, noting the fact that clients were not simply desensitized to the trauma, but had also processed it to the point that it no longer served as a trigger to intrusive or numbing symptoms and became integrated into their non-trauma life narrative. If she were to rename it now, it might be simply called bilateral stimulation (BLS) reprocessing therapy, because other kinds of BLS are now used. Clinically,

“desensitization” seems to work as an inhibitor of affect. Conversely, the BLS of EMDR seems to encourage communication and flow between different parts of the brain (Amano & Toichi, 2016), leading to less segregated and more fluid expression of affect and the integration of affect, cognition, and behavior in the reprocessing of the trauma.

Based on her research findings, Shapiro began to offer training in EMDR, with a strong focus on insuring fidelity to the research-based protocol. She used a model of a 2-weekend, 3-day training intensives. She established two levels of training, beginning and advanced, the latter addressing specialized applications of EMDR, such as with highly dissociative persons, or with children. To ensure the fidelity of EMDR practice and to promote research, Shapiro started a training organization, the EMDR Institute, which became the main international training and research organization. In 1995, a separate membership organization, the EMDR International Association (EMDRIA, www.emdria.org) was founded. It began to certify consultant/trainers (who provide and oversee the training of new EMDR practitioners) and to certify practitioners and also began to hold an annual conference at which research findings and clinical innovations are presented. EMDRIA, which currently has over 8,000 active members, has certified many independent trainers and training organizations, who now offer the majority of EMDR trainings in the United States.

EMDR’s Social Justice Mission

In 1995 following the terror attack on the Murrah Federal Building, several EMDR trainers and practitioners spontaneously organized a group that went to Oklahoma City, where they connected with victim services organizations and offered pro bono EMDR to victims and first responders. This group of practitioners, many of whom were among the first EMDR trainers and consultants then set up low-cost trainings for local psychotherapists. These volunteers initiated the paradigm for what became the EMDR Humanitarian Assistance Program, which is now called Trauma Recovery, www.emdrhap.org/content/trauma-recovery-network/. This organization responds with pro bono care and training to traumatic events all over the world

with its Trauma Recovery Networks. Trauma Recovery Network members team with local victim response and mental health professional organizations throughout the world, offering pro bono EMDR treatment and trainings to local practitioners at the site of mass trauma and disasters. Additionally, this organization goes to places in the world where there has been chronic conflict, offering EMDR treatment and training as a preventative strategy, addressing the effects of intergenerational trauma. It also now trains thousands of agency/nonprofit practitioners all over the world, offering low-cost and pro bono trainings for therapists working with underserved populations in agency settings.

Nearly 100,000 people have been trained in EMDR worldwide, and there are EMDR professional associations in many countries and regions of the world. There is a healthy flow of information through journals, international conferences held in Europe, Australia, Asia, the United States and Canada, and via many online forums. As an example of the world-wide adoption of EMDR, the second author met the coordinator of the Cambodia EMDR training network (himself a Cambodian trauma therapist) in the fall of 2016 while waiting for a delayed airplane in the Phnom Penh airport, a serendipitous experience exemplifying EMDR’s broad reach. There are more than 60 scholarly books available on EMDR and related topics as of the end of 2018, as well as a plethora of journal articles.

Research Findings on EMDR’s Effectiveness

There now exists a large and robust body of research supporting the effectiveness of EMDR in the treatment of trauma. The research also emphasizes its effectiveness given, its relatively short duration over the course of a limited number of sessions (especially for one-time trauma), and the persistence of its positive effects over time. Additionally, the fact that there is no requirement for the client to verbally recount the trauma (instead, they are asked to focus on it internally and imaginably rather than discussing it) and no homework is required make it more attractive to clients than other evidence-based treatments. Below is a brief sampling of some of the more persuasive studies.

Van der Kolk et al. (2007) reported results from a randomized clinical trial comparing effects of EMDR, fluoxetine, and pill placebo in the treatment of PTSD in a sample of 88 adults each receiving 8 weeks of treatment. Seventy-five percent of those assigned to the EMDR condition reported being symptom free at 6-month follow-up, while those in the fluoxetine and pill placebo groups did not report improvement, even though fluoxetine has been identified as a likely evidence-based psychopharmacological treatment for posttraumatic symptoms.

A number of randomized trials have been done regarding EMDR's effectiveness with children, including those exposed to disasters and motor vehicle accidents, comparing EMDR to cognitive-behavioral therapy (CBT) and trauma focused-cognitive behavioral therapy, no treatment control, and waitlist control (Ahmad, Larsson, & Sundelin-Wahlsten, 2007; Chemtob, Nakashima, & Carlson, 2002; de Roos et al., 2011; de Roos et al., 2017; Diehle, Opmeer, Boer, Mannarino, & Lindauer, 2015; Jaberghaderi, Greenwald, Rubin, Dolatabadim, & Zand, 2004; Kemp, Drummond, & McDermott, 2010; Soberman, Greenwald, & Rule, 2002; Wanders, Serra, & de Jongh, 2008). Study sites have included those in Europe and Iran. In all of these studies, EMDR achieved better or equal results to comparison treatments and was found to take less time to achieve reduction or loss of symptoms and PTSD diagnosis than other interventions.

Numerous studies of a variety of methodologies have been conducted on subjects with various types of index trauma. EMDR has been compared favorably to CBT, Prolonged Exposure, and no-treatment control conditions, among others. A sampling of peer-reviewed studies of the effectiveness of EMDR in various populations include those with earthquake survivors (Abbasnejad, Mahani, & Zamyad, 2007), refugees (Acarturk et al., 2016; Ter Heide, Mooren, Van de Schoot, de Jongh, & Kleber, 2016), life-threatening cardiac events (Arabia, Manca, & Solomon, 2011), cancer (Capezzani et al., 2013) Multiple Sclerosis (Carletto et al., 2016), combat-related trauma (Carlson, Chemtob, Rusnak, Hedlund, & Muraoka, 1998), symptoms associated with chronic psychotic disorders (de Bont et al., 2013), adult survivors of childhood sexual abuse (Edmond & Rubin,

2004; Edmond, Sloan, & McCarty, 2004), sexual assault survivors (Rothbaum, 1997; Rothbaum, Astin, & Marsteller, 2005), workplace violence (Högberg et al., 2007; Tarquinio et al., 2016), general PTSD symptoms with unspecified index trauma (Ironson, Freund, Strauss, & Williams, 2002; Nijdam, Gersons, Reitsma, de Jongh, & Olf, 2012), and disasters in the workplace (Jarero, Artigas, & Luber, 2011; Jarero et al., 2015; Power et al., 2002). EMDR has been utilized for stress inoculation training (Lee, Gavriel, Drummond, Richards, & Greenwald, 2002), and for survivors of multiple traumas being treated in an HMO setting (Marcus, Marquis, & Sakai, 1997, 2004). Novo et al. (2014) found EMDR helpful in a population of patients dually diagnosed with PTSD and bipolar disorder.

EMDR therapy is now considered one of the most effective and among the most researched treatments for the symptoms of PTSD. It has received a strong recommendation as an effective treatment for PTSD all major PTSD Clinical Practice Guidelines—including those from International Society for Traumatic Stress Studies (Foa, Keane, Friedman, & Cohen, 2009) and the U.S. Department of Defense, Veterans Affairs Office (Hamblen, 2017)—with the exception of the American Psychological Association which gave it a conditional recommendation. The latter guideline utilized a different review process and data interpretation than the others (American Psychological Association, Guideline Development Panel for the Treatment of PTSD in Adults, 2017) but noted that additional research may result in a strong endorsement.

What Happens in EMDR: Overview and Specifics

In attempting to make this article as useful as possible to practicing psychologists and other mental health professional we will go into detail as to how EMDR is applied in clinical practice. Much of this material may be found described in more complete detail in F. Shapiro's (2018) third edition of her basic explanatory text. We include examples from our own practices of ways that we have approached some of the clinical dynamics that inevitably arise in any trauma treatment.

The Eight Phases of EMDR

EMDR is delivered in an eight-phase protocol that attend to three main elements: (a) past traumatic events that set the foundation for distress and pathology, (b) current situations that cause disturbance, and (c) future templates for appropriate how to modify problematic coping behaviors that developed posttrauma and action in how to integrate the trauma experience into a whole-life narrative. For instance, one might process a client's childhood and adult abuse traumas, then process current situations that trigger those memories, and then look at overvalued and used yet problematic coping responses to those traumas. The next phase of the treatment is to have the client imagine and describe adult, assertive behaviors. For instance, with a survivor of abusive relationships, this future-pacing component of the treatment might include visualizing avoiding abusive others, or firmly saying, "NO!" and walking away from possibly abusive situations. EMDR thus addresses past trauma, current problematic coping behaviors, and the development of future effective, adult responses when trauma cues re-emerge at any time.

EMDR is not a neutral intervention; it has quick and often profound effects on clients. Unlike what was argued by EMDR's earlier critics, it is not simply a placebo caused by the waving of the clinician's hands (Herbert et al., 2000). Thus, all phases of the treatment—reprocessing old trauma, addressing trauma responses, and preparing for and practicing more effective behaviors—are crucial both to client safety and to successful outcomes. Francine Shapiro's (2001) amended standard protocol is described in the following section of this article and is adapted with modifications from the first author's *Trauma Treatment Handbook* (R. Shapiro, 2010).

Phase 1. Client history includes inquiry regarding client presenting concerns, goals, readiness, safety factors, and screening for the presence of dissociation. Therapist and client identify "targets," that is, the traumatic events or experiences that will be the focus of the treatment. Assessment of client safety, readiness for change, and testing for the presence of severe dissociation is involved. Anecdotal evidence from many long-time EMDR practitioners suggests that the fastest way to find an

undiagnosed case of DID is to do EMDR without first screening for its presence. Reasons why this is so remain unclear but EMDR appears to have the effect of breaking down dissociative barriers in persons with previously undetected DID so that the presence of multiple dissociated ego states that were previously not in evidence emerges during the treatment. Thus, use of screening instruments for dissociation, such as the Dissociative Experiences Scale, is considered a core component of assessing client safety and treatment readiness. While persons with DID may be treated with EMDR, such treatment requires a more extensive period of preparation and additional training of the practitioner.

Phase 2. Preparation includes creating a therapeutic alliance with the client, setting expectations, and building and practicing resilience and developing internal resources for safety and self-soothing to rely on as the trauma is processed. The most common starting point is for the clinician and client to explore creating visual and somatic representations of a "safe" or "healing" place. Or they may develop a visualization of a "circle of love," of a group of people, creatures, and even divine or imaginal beings by whom the client feels loved and who the client can imagine being surrounded by during the reprocessing components of EMDR. Client and therapist also work to develop skills at relaxation and mindfulness to help the client remain engaged fully during reprocessing while painful affects, somatic experiences, and memories emerge.

Here's an example of this sort of safety preparation from the work of the first author that she has used with people who have had a particularly horrific experience of abuse:

Imagine a place for your healing. Because you say that you've never felt safe on this earth, we can even take it "off planet," to a place with no people, just beauty, perfect weather, and whatever you need to heal. It could be anywhere. What would you prefer? And it should have a house, or a cabin, or a castle for you to stay in. Which would you like? What else makes it comfortable or healing? Good. Imagine being in that place right now. While you hold that image, move your eyes back and forth while you watch my fingers.

Installing or *installation* are EMDR terms referring to the use of BLS to create or embed positive internal resources, or strengthen those

already present, in preparation for embarking on the reprocessing phase of treatment.

Next, therapist and client agree on a “stop” word or action that will stop the process when or if it becomes too much for the client. They also agree on a “keep going” signal for the client to use. In this way, clients know they have control over the processing session and that they can call for a stop or a continuation as they need.

Such preparation can take place in a single session in the case of an adult with a one-time adult-onset trauma or it may take months for a client with severe attachment wounds, extreme or repetitive trauma exposure, a history of relational betrayal, or very low capacity for affect regulation or personal safety. In other words, for almost all clients with complex trauma, the preparation and safety phase of EMDR will be longer, consistent with generally acknowledged best practices for the establishment of safety prior to trauma processing, no matter the technique used (Harvey, 1996). For people who never experienced or trusted “safety” due to a personal history of betrayal trauma and disorganizing childhood attachment experiences, there are a variety of alternatives to establishing a “safe” place. The development of imaginal indicators of safety, or resourcing, is a necessary prelude to any trauma processing. Therapists using EMDR should also attend to actual safety in their clients’ lives. Clients currently living in unsafe situations, with unsafe partners, or working in unsafe environments may need to be introduced to what the second author refers to as the “safe enough” construct in which the therapist and client work together to generate a baseline context that is as safe as possible, given the client’s lived realities. This too may take a considerable amount of time to achieve with the client who has had a more extensive history of unsafe people and environments. And, it is useful for the therapist to recurrently and frequently check on the client’s safety status over the course of the treatment.

When the client is sufficiently safe and “resourced,” the therapist tests how the client responds to the use of saccadic eye movements or other forms of BLS to be used during the processing phase. Besides eye movements, various kinds of BLS including alternating taps by the therapist on the client’s hand, buzzes from commercially available electrical tappers, or alter-

nating tones delivered through headphones have been found to be effective in EMDR. Therapists are advised to check the client’s comfort with each modality, by using one or the other BLS with a resourcing move during the preparation phase. Many highly dissociative clients report that eye movements are overstimulating for them and express preference for tapping modalities.

Phase 3. Assessment in EMDR is the initial component of trauma processing, which means that it is essential that the preparation and safety stages have been attended to first. Assessment, unlike how it is commonly utilized by psychologists, refers to a collaborative process of therapist and client assessing which trauma, or which aspect of a trauma, will be addressed and in what order, and gathers information that will allow both parties to know whether the treatment is being effective. It proceeds through the following questions to the client:

- (1) “What’s the worst part of the trauma/experience? Can you visualize that, please?” Alternatively, the client may be asked “What was the first time this trauma occurred?” in those instances where the trauma was repetitive.
- (2) “When you’re seeing that image, what do you say to yourself?” This generates what is known as the NC. Examples of NCs are “I’m going to die,” or “This will never end,” or “I’m at fault for this happening.”
- (3) “What would you like to be saying to yourself?” This question elicits what is known as the positive cognition or PC. Examples of PCs are “I survived,” “I’m safe now,” or “It wasn’t at fault.”
- (4) “How true does the PC feel to you right now on a scale of 1 to 7, if 1 feels *completely not true at all* and 7 *completely true*?” This set of questions establishes the validity of cognition (VoC) of the PC. A goal of EMDR treatment is to raise the VoC of the PC to 7.
- (5) “When you think about that trauma/experience, what are you feeling right now?” This question elicits information about the affect associated with the trauma. A client may also indicate that they feel nothing, for example, numb or dissociated.

- (6) “How big is that emotion (or how strong is that numbness), on a 0 to 10 scale, where 0 feels *fine or fully alive*, and 10 is the *worst or most numb you can feel*. This question assesses the subjective unit of distress (SUD) associated with the trauma prior to treatment. A goal of EMDR is to reduce the SUD score to 0, or to 1 if there is survival value in continuing to feel some distress about the trauma in question.
- (7) “And where are you feeling that emotion in your body?” This question brings in the somatic, embodied component of the trauma, and provides both parties with a somatic marker by which to assess the success of the intervention.

After these assessment questions are answered, the treatment moves into the BLS phase. The client is instructed to momentarily hold in mind the trauma image, the NC, the emotion, and the somatic experience, and then to attend to the previously agreed-upon form of BLS “while you focus on what you are feeling and let whatever emerges come up and pass through you.” A metaphor commonly offered in EMDR is to imagine that the traumatic image and its associated affects, somatic experiences, and cognitions, are on a train that is passing by and going away. The clinician typically offers sets of 24 rounds (or back and forth movements of BLS), which constitutes the trauma processing component of EMDR. This is repeated as needed until the client reports a SUDs of 0 and a VoC for the PC of at least 6.

Starting trauma processing brings together the image, cognitions, emotions, and body sensations associated with the trauma. The client attends to the BLS while noticing the emotions, thoughts, and images change. Some clients report that images, affects, and somatic experiences intensify before they begin to shift or subside. [Solomon and Siegel \(2003\)](#) have hypothesized that EMDR works through the BLS beginning in the Assessment Phase, starting with the image shifting from left-brain cognitions to right-brain emotions to left-brain assessments of emotions while holding the emotion, to right-brain awareness of what’s happening in the body. These authors suggest that holding affect, cognition, and sensation simultaneously evokes and activates areas and

systems of the brain to work in concert rather than separately, reconsolidating the memory and that this in turn brings awareness that the survivor is in the present where the trauma is over. Although no research has yet addressed this hypothesis, it seems consistent with what clients report during and after EMDR, that is, that the treatment’s focus on the entire embodied experience of the trauma with BLS as a present-day focus allows them to know that the trauma is not happening in the here and now, no matter how powerful the feelings might be.

Phase 4. Desensitization includes reprocessing the memory using BLS until SUDs and VoC are at desired levels. The clinician may offer longer sets (than the standard 24) when they observe a client continuing to process strong affect, or shorter sets when they notice a client dissociating or if the client uses the agreed upon “stop” signal. These processing sets are offered until the trauma is cleared when the client reports a reduction in the SUDs level to 0 or 1.

Observation of EMDR at work suggests that BLS activates the integrative capacity of the brain, allowing intrusive and somatically held reactions to trauma to become fully integrated into the person’s narrative memory. Some researchers of EMDR suggest that the dual attention—clients remembering and feeling while paying attention to the here-and-now BLS—is part of why it works ([Siegel, 2002](#)). Others have argued that the BLS promotes the connection across the corpus callosum ([van der Kolk, 2002](#)). [Stickgold \(2002\)](#), a sleep researcher, has argued that BLS stimulates a REM-like state that helps process the previously unmetabolized trauma. Whatever the brain mechanisms are that underlie EMDR, the net result is that trauma is processed to the point where it is successfully integrated into the client’s nontraumatic memories life narrative in ways that it had not previously that eliminate PTSD symptoms.

At the onset of the processing phase, the therapist reminds the client that they can signal “Stop!” at any time. Between each set, the therapist makes eye contact with the client and asks a question along the lines of “What do you notice now?” Eye contact is particularly relevant in insuring that the client has not begun to dissociate. The therapist and client briefly discuss what the client notices at the end of the set, using a technique known as “cognitive inter-

weave,” during which the therapist asks the client open-ended questions about their awareness, or offers psychoeducation about trauma and trauma response. Then the therapist will direct the client to attend to what they noticed and begin the next set.

After the first several sets, the client may initially become emotionally activated and perceive the trauma as being more intense. This perception usually lasts for a few sets and the clinician reassures the client that this is typical, and likely to lessen as the processing continues. It is best not to interrupt the processing when this activation is experienced unless concerns for safety emerge or the client signals to stop. Doing so prematurely has the effect of closing down the exposure before the response naturally lessens, creating the desensitization.

At this juncture the client commonly begins to experience transformation of the affect associated with the trauma, often starting with fear, then anger, then relief that the trauma is over, then here-and-now sadness that it happened at all. At this point the therapist checks on the PC, the VoC, and assesses the client’s distress level with questions like, “What do you notice in your body now when you think about the trauma/experience?” If the VOC is still lower than 7 and the client reports residual somatic responses, the therapist then clears whatever persists, using the same protocol for processing the trauma.

When the negative sensations and affect are reduced to a SUDS of zero, and when the client rates the new PC at 7 on the 7-point scale, the clinician administers another round or two of BLS to “install” (i.e., connect or strengthen) the new state and thoughts. Should new trauma intrusions arise between sessions, the therapist instructs the client to use the resourcing methods developed in the earlier part of the treatment, such as visualizing the safe/beautiful place, or their circle of love for support.

During this phase, some therapists use a modified protocol, EMD, to contain a particularly horrific trauma or keep a chronically traumatized and/or dissociative client present in the moment. With EMD, the therapist uses shorter sets of eye movements, and asks a more targeted question, for example, “When you think of the rape/shooting/etc., what do you notice now?” instead of the standard “What do you get now?” at the end of a set. Use of this terminol-

ogy keeps the client more focused on one specific traumatic event, instead of several (Kiessling, 2018).

Phase 5. In the installation of the PC, the client holds the trauma memory in mind simultaneously with the PC as BSL is applied. The therapist then inquires at the end of each set as to the VoC rating of the PC. At completion of treatment a client will, while holding the memory in mind, be able to completely endorse the PC, for example, “It’s over,” “I’m safe now,” “I’m blameless,” or “I’m lovable,” reporting a VoC of 7 for the PC.

Phase 6. The body scan entails assessing residual bodily distress and somatic representation of the trauma. If it emerges via evidence of a SUDS rating over 0, the therapist and client will continue to process the somatic material until it the survivor endorses a SUDS level of 0. “Go through your whole body, noticing any distressing sensation. Focus on that, and we’ll do more eye movements.” F. Shapiro (2001, 2018) has noted that for some kinds of trauma, a SUDS of 1 may be a more appropriate treatment goal for those clients who remain in situations of continuing risk and who need to retain some degree of heightened awareness.

Phase 7. Closure includes between-session monitoring of any continuing changes, setting expectations, and, if needed, encouraging the client to achieve a state of emotional equilibrium. Clients are informed that they are likely to experience some resurgence of intrusive material, particularly in dreams, as the neural networks involved in processing the trauma continue to build connections and thus to change configuration. If the trauma isn’t completely cleared, flashbacks of old or even previously undiscussed material may emerge between sessions, alerting the clinician to the need to continue processing the index trauma. This is especially likely to occur for individuals with histories of repeated trauma and complicated responses and consequences. Moreover, these clients may need to be assisted in using their safe places or in using imaginal containers (all developed during the first phase of treatment) to “re-center” to be able to safely leave a session and keep the material in check between sessions. An example of doing this includes asking the client questions such as

What receptacle is big enough to hold that terror through the week and before our next session? A water tower? Great. Imagine pumping all the terror out of your body into that tower (BLS here). If you have any leftover terror during the week, you can imagine sending it there.

Phase 8. Reevaluation includes checking in to see if the client requires additional processing for the previous target or new but associated material. EMDR therapy can activate material associated with the original trauma, causing additional previously unknown or unavailable trauma to emerge. Clients may come to subsequent sessions with new, but related, trauma targets. For instance, processing a rape in adulthood may activate previously dissociated material regarding sexual abuse in adolescence. In this phase, when the therapist checks in about the client's status since the last session and learns about any additional trauma memories, they then change the processing target to address the new trauma. The client is first reminded of the previously installed resources and asked to access them and use them in the additional processing, for example

Can you bring in that team we found inside you? Intelligence, Strength, Humor, Stick-to-it-iveness, and remember when they worked? Watch my fingers (or other BLS) while you feel each quality and remember using them together. Great. Now imagine this new upsetting memory while you hold those resources.

The Three-Pronged Protocol

When processing a past event that the client fears will recur in the future, EMDR therapists use the three-pronged protocol, processing past occurrences, an imagined present occurrence, and an imagined one in the future (Kiehl, 2018). This protocol is most often useful in clearing past incidents of childhood sexual abuse, fears of current sexual experiences, and imagining future, trauma-free sex. One client with whom the first author utilized this protocol left her a poignant voicemail after the third EMDR processing session, "Robin, I just had sex with my husband, and for the first time in 12 years of marriage, my grandfather wasn't in the room! It was so fun!" While not every single client will have such a quick response, it is not unusual for EMDR to accomplish a resolution of a particular trauma in a relatively brief period of time.

EMDR Targets—Not Just for PTSD Anymore

As EMDR has developed over the past 30 plus years, a range of trauma and nontrauma symptoms have become targets for reprocessing and desensitization (i.e., depression, anxiety, dissociation, boosting affect tolerance and internal resources performance, phantom limb pain, chronic pain, multiple chemical sensitivities, obsessive-compulsive disorder, traumatic grief, eating disorders, addictions, avoidance, shame, building positive affect, attachment issues, children's trauma, personality disorders, religion-related trauma and psychosis) and specific protocols developed for each. There is also an EMDR protocol for couple treatment, focused on clearing prerelationship trauma, in-relationship trauma, and developing future templates for better interactions. These protocols address trauma that underlie the presenting problem while not focusing on treatment of PTSD symptoms. Clinicians seeking best resources on EMDR-related research on these and other topics are referred to <https://www.emdria.org/page/emdrarticles>, which is the section of the EMDRIA website where emerging research findings are published. The *Journal of EMDR Research and Practice* has been published by Springer, and is another source of current, peer-reviewed research on EMDR and its applications.

EMDR and Other Psychotherapies

In both authors' experience with EMDR, there appear to be two kinds of EMDR therapists. One consists of those who apply the Standard Protocol religiously, with no alteration and with complete fidelity. The second are more flexible and have integrated EMDR with other therapeutic modalities, a trend supported by F. Shapiro's (2002) volume on EMDR as an integrative psychotherapy, in which EMDR's integration into other modalities as well as EMDR's own integrative nature is explored. Clinicians of this second type use other therapeutic approaches and tools in the Preparation phases (Kiehl, 2018; Knipe, 2015). Some embed EMDR into their other therapeutic modalities to clear trauma. For example, Wachtel (2002) and Arad (2018) have discussed integrating EMDR into psychodynamic treatment, and Marich and

Dansiger (2017), have developed an integration of EMDR and mindfulness approaches to treatment. A very recent book, *EMDR Therapy and Somatic Psychology* by Schwartz and Maiburger (2018), demonstrates how to keep clients present, feeling, and safe, while effectively treating the range of symptoms of trauma and using EMDR integrated with many other approaches.

Dissociation can occur both at the time of a trauma (peritraumatic dissociation), and later as a relatively autonomous and spontaneous post-traumatic response as what was once a defensive operation or an adaptation to the trauma becomes patterned reactivity. Some scholars of dissociation, particularly those associated with the structural dissociation model (Steele, Boon, & Van der Hart, 2016; van der Hart, Nijenhuis, & Steele, 2006) suggest that all trauma diagnoses, including PTSD, involve dissociative process. Where dissociation is pronounced to the point of derealization and depersonalization, the client may qualify for the “dissociative type” of PTSD as included in the recently revised *Diagnostic and Statistical Manual of Mental Disorders* (fifth edition, American Psychiatric Association, 2016). As a result of this recognition of the relationship between trauma and dissociation, EMDR is now commonly integrated into ego-state therapies, which focus on addressing the different roles and “parts” or “part-selves” of clients, including those that make up the more separated personality states found in DID (Forgash & Copeley, 2008; Knipe, 2015; Parnell, 2013; Paulsen, 2009, R. Shapiro, 2016; Twombly, 2005).

EMDR Trainings

It is essential that psychotherapists wishing to practice EMDR therapy receive formal training in this method. This requirement aligns with the competency standard of the American Psychological Association’s ethics code and reflects similar requirements in the ethical code of other mental health professions. Because EMDR is so innovative and different from psychotherapy as is usually practiced such formal training is necessary to develop the competence to practice this modality safely and effectively.

In the United States, Canada, Australia, and Europe, there are many options available for therapists seeking training in EMDR. Participat-

ing in a training is a crucial component of developing competence, particularly with an innovative model that departs in so many ways from traditional psychotherapies. As noted above, the classic model for EMDR training occurs in two intensive blocks of 3 full days each over the course of 2 weekends. After the first 3 days of training, attendees are required to obtain 10 hr of adjunctive consultation on cases they are treating with EMDR from an EMDRIA-certified consultant before attending the second level. Trainings include lecture, demonstrations, and extensive supervised practicum.

Because of the importance of receiving accurate and well-informed training in EMDR we are offering suggestions, without endorsement, of some of the better-regarded and reputable training options in the Appendix. Neither author has a financial relationship or offers trainings with any of the suggested training programs. While there are many other independent EMDR trainers available, we have included the group in the Appendix because they represent some consensus regarding trainings that adhere to best practices and are closest to protocol in their approach.

Risks of “Unofficial” EMDR Trainings

Clinicians seeking EMDR training should check to ensure that the course is certified by EMDRIA. Simply because CE credits are made available by whoever is offering the class does not make an EMDR training one that is official, safe, or effective. The first author has served as a posttraining consultant to clinicians whose training, obtained through other sources, omitted foundational information about trauma and the essential components of EMDR, creating risk for both clinicians and their clients. A basic understanding of trauma and trauma-response is essential. An abbreviated training which omits this information as well as the extensive practicum component of official trainings is especially hazardous. This emphasis on receiving proper training in EMDR is consistent with what is emphasized in other training programs (e.g., those in dialectical behavior therapy, another innovative approach that integrates elements not commonly found in psychotherapy-as-usual) that focus on inculcating fidelity to protocol and adherence to principles in their

training processes. A fair amount of research has been done looking at the effects of training in EMDR; failures of adherence to protocol may not always lead to harm, but it can, as the authors can attest. Importantly, they will not provide the beneficial effects of EMDR.

Professional Acceptance of EMDR

Despite this extensive body of research, there are many practitioners, journals, and organizations that consider EMDR therapy as marginal or not acceptable. These perspectives which date back to the initial introduction of EMDR and its unique method, reflect bias that has been unchanged by 2 decades of empirical research on EMDR.

While the evidence base for EMDR is now considerable, its development followed a trajectory that was very different from other therapies. EMDR therapy, unlike CBT and exposure therapies, developed apart from the context of academic clinical research labs. It is not an adaptation for trauma of techniques that had initially focused on anxiety and depression, as is true for Prolonged Exposure and CBT. EMDR was developed by Francine Shapiro, an independent scholar, initially through self-observation of a process that assisted her in processing an upsetting experience. She then extended her observations to others and experimented with and developed the eye movement technique. This was followed by the development of her initial method (EMD) and protocol which was later redeveloped into the 8-stage standard EMDR protocol described earlier. The initial research on EMDR therapy was conducted in clinical settings that were not institutionally affiliated. Rather, research on EMDR, which was always focused on posttrauma symptoms, began to be done by independent researchers and scholars, after its effects were observed and reported on in practice by large numbers of trauma therapists.

While the methodology used in the development and initial testing of EMDR mirrors that of grounded theory (Glaser & Strauss, 2000), a well-accepted research method in which qualitative data are collected to develop hypotheses that can then be quantitatively tested, it is a different trajectory than the more traditional methods utilized in the study of CBT and exposure based treatments. EMDR therapy was

initially marginalized due both to its unique (and some would say bizarre method) and its lack of an evidence base. That has changed over time as its research base has become more conventional and sophisticated, and particularly as impressive findings have been consistently reported. For example, between the first and second editions of the International Society for Traumatic Stress Studies' *Guidelines for Treatment of PTSD* (Foa, Keane, & Friedman, 2000; Foa et al., 2009). EMDR went from being criticized to being included among well-accepted and effective treatment approaches for the amelioration of symptoms of PTSD.

Science vs. "Scientism"

As Peterson (2006) s noted, the term *science* is sometimes used to obscure what he referred to as "scientism," an almost religious adherence to a particular methodology as representing true science. "True believers" who found EMDR difficult to comprehend launched intensive campaigns of criticism, and even ridicule with the goal of driving it and its practitioners out of the mainstream of treatment (Lohr, Lilienfeld, Tolin, & Herbert, 1999; Rosen & Lohr, 2000). The intensity of the contempt expressed for EMDR and Francine Shapiro herself was extraordinary; while almost all treatment innovations are greeted with skepticism, which is reasonable, the degree to which EMDR was stigmatized remains disturbing.

We would argue that trauma treatment at its best requires a willingness on the part of researchers and clinicians to be continuously curious about the growing bodies of research on emerging interventions and the assessment and acceptance of data from different research methodologies. This implies acting as local clinical scientists, integrating the data from research with the data emerging from their clients' experiences.

The reality is that EMDR is a different kind of treatment. It looks odd and has a unique method; the second author was late to adopt EMDR therapy in her practice because of how unlike therapy it seemed. EMDR activates trauma processing in a much different manner than do attachment-based, interpersonal, or cognitive therapies. Its mechanism of action, much speculated upon by both supporters and critics,

continues to be difficult to know and remains under study. It often works very quickly for people who have attempted many other evidence-based treatments and been told by their therapists that their job is to accept their new normal of some amount of PTSD symptoms. EMDR challenges preconceived notions about how psychotherapy works, and how quickly it can work, particularly with trauma survivors.

EMDR-Related Trauma Treatments

Brainspotting. Grand (2013) was an early adopter, independent trainer, and innovator in the field of EMDR. He noticed that during eye movements, clients would often blink at a spot in their line of sight as they followed the clinician's fingers or a light bar. He experimented with directing clients to hold their gaze at those spots of blinking or other involuntary movements or changes (i.e., facial flushing or loss of color) and found that focusing on some points brought up more agitation, specific affects, or instant calming. Grand started using audio BLS, eventually developing music CDs (bilateral sound) that, when the clients wore headsets, moved the music from one ear to the other. He developed a way to find "resource spots" and "trauma spots" and, depending on the client, would (a) move back and forth between the spots, (b) hold the client in the trauma spot, or (c) have the client focus on a trauma while looking through the resource spot. Later, he and others found that highly dissociated clients had a "spot" for each dissociated ego state. Grand refers to some brain scan research suggesting that EMDR works primarily in the limbic system, and notes that what he termed *brainspotting* is suggested to work on more primitive brain mechanisms, although no research has yet been conducted to support this hypothesis. As with EMDR therapy itself, the mechanism of action of brainspotting is unknown. Several studies of brainspotting, available at <https://brainspotting.com/about-bsp/research-and-case-studies/>, indicate high effectiveness in the treatment of trauma at rates comparable to those found with EMDR. By anecdote, brainspotting is particularly effective with the most dissociated and least resourced clients (Grand, 2013), with these clients reporting that while EMDR itself was overstimulating, provoking responses from multiple dissociated ego states, brainspot-

ting allowed for a focus on one traumatized ego state at a time.

As of this writing the research base on brainspotting resembles that of EMDR in the early 1990s. Using the American Psychological Association's broader definition of what constitutes evidence-based practice it may be considered such a practice from the perspective of multiple, multisite, multipractitioner, and multicient anecdotal reports of good outcome. While these data are correlational in nature for the most part, they suggest that this is an EMDR-related innovative practice that trauma specialists may want to explore as part of expanding the options they can make available to clients.

Developmental needs meeting strategy. The developmental needs meeting strategy (Schmidt, 2009) utilizes ego state therapy, EMDR, and the findings of developmental traumatology to heal primarily attachment wounds. Clients are guided to create an internal "team" of a nurturing adult self, a protective adult self, and a spiritual core self. Distressed parts of self are guided to make a loving connection to this resource team. BLS is used throughout this process. Trauma memories, tied to the attachment issues, are cleared in this process.

To date all information about the effectiveness of this offshoot of EMDR for treating trauma is anecdotal in nature. Practitioners interested in further information or seeking training are directed to the website of the Developmental Needs Meeting Strategy Institute, <http://www.dnmsinstitute.com/>.

Life span integration (LI). Pace (2003) developed another EMDR-based ego-state therapy, LI. In LI, the current adult part of the client goes back to the time of the traumatic event, talks to the part of self that is "stuck" there, and moves it up to the present. The adult orients the trauma parts (usually younger part-selves) to the safety of the present, goes back to the traumatic past and repeats the process until there is no "child" left back in the past, and changes in affect signal the processing and resolution of the trauma.

Therapists interested in pursuing training in LI can seek information at <https://lifespansintegration.com/upcoming-lifespan-integration-trainings/>. LI offers three levels of training and between-training consultation, utilizing a train-

ing model very similar to that of EMDR. Anecdotal evidence from clients with complex trauma and dissociation indicates reports of effective resolution of traumas resulting from the use of this technique. Research on LI's effectiveness for treating trauma has been very sparse, with only two studies addressing this question, neither of them published or peer reviewed.

Conclusion

EMDR is a well-researched, widely used, effective and well-supported innovative psychotherapy initially developed for the treatment of PTSD symptoms. In the 3 decades since it was introduced, it has also been found helpful for the treatment of a variety of other clinical conditions. Its possible applications continue to expand; therapists wishing to integrate EMDR therapy into their work are encouraged to remain current with its literature.

EMDR is perhaps the most innovative and yet evidence-based treatment for trauma that has yet to be introduced. Departing from all previous models of psychotherapy, EMDR broke the barrier between cognitive, somatic, and affective components of trauma treatment by integrating them into one highly effective treatment strategy that addressed all three. Its developer, Francine Shapiro, dared to take seriously an intervention strategy—BLS, initially involving eye movements but expanded to include other bilateral sense-based stimuli such as touching and hearing—that was so far outside how psychotherapy was previously practiced that it was ridiculed, defended against and resisted until a research base began to establish its effectiveness and legitimized it. Besides its internal integration of various dimensions of other treatment methods, externally integrative as well, being woven into psychoanalysis (Wachtel, 2002), CBT (Smyth & Poole, 2002), Lazarus's multimodal therapy (Lazarus & Lazarus, 2002), hypnosis (Gilligan, 2002), family systems therapy (Kaslow, Nurse, & Thompson, 2002), and others. As Norcross and Shapiro (2002) noted, these various authors who have integrated EMDR with other methods truly exemplify psychotherapy integration in process

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Appendix

Recommended EMDR Trainings

- (1) The EMDR Institute has been Francine Shapiro's base since she founded it. While she no longer conducts the trainings as she did in the early years, EMDR Institute trainers are experienced and teach the simple, original Basic Training with high fidelity to her protocol (see <http://www.emdr.com/>).
- (2) Trauma Recovery (formerly EMDR-HAP) offers low-cost trainings for non-profits in the United States, Canada, and all over the world, as well as trainings at no cost for clinicians at the site of disasters and mass trauma events, especially in the developing world. Nonprofits typically contact TR to arrange to set up a training for their staff and other local clinicians. They may be contacted at <https://www.emdrhap.org/content/events/training-schedule/>.
- (3) Laurel Parnell's Basic Training is an attachment-based curriculum that integrates her work on ego-state resourcing into the beginning phases of EMDR training (see <http://drlaurelparnell.com/training/>).
- (4) Roy Kiessling's Basic Training starts with EMD, a modified protocol that can be less distressing to complex trauma clients as it focuses on desensitization rather than on contact with and reprocessing of the trauma material. His trainings most closely resemble F. Shapiro's earliest work, with reflects his having been one of her original students as EMDR was being developed. For many years, he was also the principal trainer for the Humanitarian Assistance Program and, thus, has broad international experience (see <https://www.emdrconsulting.com/trainer/kiessling/>).
- (5) Ricky Greenwald's training organization offers training that may be of particular interest to clinicians working with children. He conducts research on EMDR and other modalities and actively recruits clinicians in the field as research partners (see <http://www.childtrauma.com/>).
- (6) Phil Manfield teaches a straightforward Basic Training on the West Coast of the United States. He is currently known for developing the flash technique, a way to barely connect with traumatic material, for affect and trauma-phobic clients (see <http://philipmanfield.com/>).

Received March 25, 2019

Revision received March 28, 2019

Accepted March 28, 2019 ■